achieved in all target vessels after further balloon angioplasty or stenting.
Conclusions: The Frontrunner XP CTO catheter is safe and effective for successful recanalization of CTO of femoropopliteal arteries and it should be an alternative method after guidewire failure.

Effect of contrast media in patients with CKD undergoing PCI

P. Ramya, D. Seshagiri Rao, B. Srinivas, Barik, Siva Prasad

NIMS, Hyderabad, India

Background: To assess the influence of contrast media over the renal function in patients of CKD.
Methods: Retrospectively 50 patients have been studied. Data regarding patient risk factors, LV function was collected. Renal function (creatinine clearance) pre, post procedure was assessed with Cockraft-Gault formula. All patients were given adequate pre and post procedure hydration. High dose atorvastatin (80 mg) on the day of the procedure. Patients were monitored for 5 days following the procedure with daily Biochemical analysis (Bl.Urea, S.creatinine,Na+,K+,Cl-).Also strict vigilance was maintained for development of local complications like hematoma , pseudo aneurysm etc.
Results: Out of 50 patients, 31 were diabetics, all were hypertensives, 14 persons were smokers.>50% of the patients had hypertension. Most common procedure was PTCA. 10 patients were already on renal replacement therapy. One of the patients studied developed significant renal dysfunction following the procedure requiring dialysis, later expired (underwent irregular dialysis sessions & follow up). Another patient who used to get recurrent episodes of accelerated hypertension, LVF, died of the same during follow-up after PTCA. In the rest of the patients there was no worsening of renal function.
Conclusion: Percutaneous interventions requiring contrast exposure are safe even in patients with renal derangement, provided adequate protective measures are taken.

Microalbuminuria as a risk factor for contrast-induced nephropathy

P. Mittal, C.M. Varma, R. Thakur, R.P.S. Bhardwaz, M. Ahmad, R.K. Bansal, U. Pandey, S.K. Sinha, P. Kumar

Department of cardiology, LPS institute of Cardiology, Kanpur, India

Background: CIN is one of the most important causes of acute renal failure in hospitalized patients with the incremental use of contrast media. We aimed to investigate whether microalbuminuria may act as a risk factor for CIN in patients with CAD undergoing percutaneous intervention.
Methods: 70 hospitalized patients (37 men, 33 women) with CAD, microalbuminuria and estimated glomerular filtration rate (eGFR) of >60 mL/min/1.73 m2, who were exposed to contrast media were compared prospectively with matched cohart of 70 patients (36 men, 34 women) without microalbuminuria. Microalbuminuria defined as 30-300 mg albumin/24 urine. All patients received prophylaxis against CIN with 0.9% intravenous saline. CIN is defined as either a 25% higher increase in serum creatinine (sCr) from the baseline levels or a 0.5 mg/dL increase in sCr at 72 h after contrast media exposure.
Results: The incidence of CIN was significantly higher than in matched patients without microalbuminuria (17.1% vs 7.1%, $p<0.05$). Correlation is more significant in patients with higher volume (>150ml) of contrast use (32% vs 11.5% p-value <0.01).
Conclusion: Microalbuminuria may be a new risk factor for the development of CIN in patients of CAD undergoing percutaneous intervention especially in patients with expected high volume of contrast use.

Experience of Left main (LM) percutaneous transluminal coronary angioplasty (PTCA) at JJ Hospital

D.K. Ware, N.O. Bansal, S. Prabhu, S. Shivapuje

GMC and JJ Hospital, Mumbai, India

Background: LM PTCA was an indication for CABG. But, LM PTCA is becoming upcoming method for the same. We present experience of LM PTCA at our institute.
Methods: Patients presenting with ACS or CSA were subjected to CAG. Those having LM significant (>50%) lesion were included in study. Patients were explained the options for revascularization and consent were taken from those opting PTCA. Patients were loaded with 60 mg prasugrel or 600 mg clopidogrel. All patients were stented with DES (Evorolimus/Zotarolimus). Pre and post procedure intravascular ultrasound (IVUS) was used. Injectable heparin was used intra and postoperatively. All patients were given aspirin and prasugrel/clopidogrel.

Patients were followed up by regular outpatient visit. Those having chest pain were subjected to CAG.
Results: Total 46 patients underwent LM PTCA. 26(56.52%) were males and 20(43.47%) were females. Mean age was 55 years. 38(82.60%) had HTN, 5(10.86%) were DM. 18(39.13%) were smoking. 28(60.86%) had dyslipidemia.

2 (4.34%) had AMI. 3(6.42%) had NSTEMI. 6(13.06%) had unstable angina. 35(76.08%) presented with CSA. Mean LVEF was 53.86%

24 (57.17%) patients had only LM lesion. Out of these, 5(10.86%) had ostial LM lesion, 12(26.08%) had mid LM lesion, 7(15.21%) had distal LM lesion. 9(19.56%) had LM plus ostial LAD lesion. 6(13.04%) had LM plus non ostial LAD lesion. 3(6.42%) had LM plus LCX lesions. 3(6.42%) had LM plus RCA lesion. 1(2.17%) had LM plus multivessel lesions.

3(6.52%) died during immediate postoperative period. Out of them, 1 presented with AMI in poor general condition, second had contrast induced nephropathy and third had multiple comorbidities who refused CABG. 3(6.52%) lost follow up, 3(6.42%) died out of hospital with unknown etiology. We performed CAG at mean 1 year follow up in 25(80.43%) patients, out of them 5(20%) had chest pain and among them 2 had de novo lesions in other vessel. All other patients had normal coronaries.
Conclusion: LM PTCA is an upcoming alternative for CABG and has good success.

Experience of percutaneous transluminal coronary angioplasty (PTCA) in post coronary artery bypass (CABG) patients at JJ Hospital

D.K. Ware, N.O. Bansal, S. Prabhu, S. Shivapuje

GMC and JJ Hospital, Mumbai, India

Background: Multivessel and LM lesions, CTO are the indications of CABG. But currently, it is possible to do PTCA in patients with coronary ischemia, even after CABG
Methods: 3 years data was analysed in post CABG patients. Details of CABG, current disease and CAG were noted. PTCA was done with DES or BMS. Patients were followed up on OPD basis
Results: There were 24 post CABG patients who underwent attempted PTCA. Mean time of presentation after CABG was 8.6 years. Mean age was 56.63 years. 13 (54.16%) were male, 11(45.88%) were female. DM, HTN, dyslipidemia were present in 14(54.33%), 17(70.83%), 16(66.66%) respectively. Avg LVEF was 40.68%.

Presentation at the time of CABG was CSA, STEMI, NSTEMI, USA in 3(12.5%), 8 (33.33%), 7(29.16%), 6(25%) respectively and presentation at the time of PTCA was 12(50%), 2(8.33%), 4(16.66%), 6(25%) respectively

During CABG, 24(100%) had LIMA to LAD graft. SVG graft was used for RCA, LCX, RCA and LCX in 8(20.83%), 5(12.5%), 10(54.33%) respectively. 1 (8.33%) had RIMA to RCA graft.

During CAG, total and subtotal occlusion was present in 6(33.33%) and 5(27.77%) patients in LAD, 5(27.77%) and 4(22.22%) patients in RCA, 4(22.22%) and 2(11.11%) patients in LCX respectively. 6 (25%) had lesion in SVG graft.

In 20 (83.33%) patients, total 26 lesions in native vessels were attempted. 2(7.69%) could not be opened because of CTO. 24 were stented, had 9(34.61%) in LAD, 9(34.61%) in RCA and 6(25%) in LCX. Total 23(88.46%) DES and 3(11.54%) BMS were used.

4(16.66%) underwent attempted PTCA to SVG graft. 3(75%) underwent successful PTCA, all with BMS. During procedure, one had graft perforation which was sealed with covered stent

All patients are following regularly in OPD. Mean follow up is 15.6 months. 5(23.80%) lost follow up. 6(28.57%) developed chest pain who underwent stress thallium scan and all were negative. 3(14.28%) presented with ACS (2 USA,1 NSTMI), only 1 had instent thrombosis.
Conclusion: Post CABG PTCA can be attempted in native vessel and graft and has high success rate as in our institute

Can rotablation atherectomy bypass the bypass surgery in 'drug eluting stent' era?

A.N. Patnaik, G. Ramesh, Jagadeeh Babu, P.V.R.C. Raju, K. Naveenkrushna

Star Hospitals, Hyderabad, India

Background: The patients with heavily calcified lesions, especially in LAD or LM are referred to the surgeons. When patients were unwilling for CABG, Rotablation atherectomy (RA) used to be popular for mechanical debulking in bare-metal stent era but later it became less popular as it was technically demanding and outcomes following PTCA were not promising. This study was done to evaluate our institutional experience with RA and followed by DES implantation in heavily calcified coronary lesions.
Methods: From August, 2012 to July, 2014 we had 18 cases of heavily calcified de novo lesions that underwent RA followed by DES implantation. The database at base line and all follow-up visits were analyzed.
Results: A total of 18 patients underwent RA for heavily calcified coronary lesions followed by DES implantation during the study period. Of them 60% were diabetics. Multivessel disease was seen in 6 patients. The lesions that had RA were –LAD (13), LCx (3) and RCA (2). Of them 30% were either balloon-non-crossable or non-dilatable (1.25 mm balloon). Procedural success was 17/18 (94.4 %). There were no procedure related MACE at 30 days. At mean follow-up of 5.5 ± 1.35 months, 1 developed CRF and 1 needed elective CABG.
Conclusion: RA followed by DES was safe with promising acute and short term results in patients with heavily calcified coronary lesions and bypass surgery could be avoided in almost all of them.

Single center experience with bioresorbable vascular scaffolds in 'on-label' and 'off- label' indications in PTCA

A.N. Patnaik, G. Ramesh, Jagadeeh Babu, P.V.R.C. Raju, K. Naveenkrushna

Star Hospitals, Hyderabad, India

Background: Since its introduction in 2012, Bioresorbable Vascular Scaffolds (BVS) had shown promising results when used in specified coronary lesions. The experience in 'Off-label' indications is limited.
Methods: We studied the technical feasibility, immediate and short-term outcome of usage of BVS the 'real-world' cases including off-label indications in our institute over the last 2 years. We used 30 devices in 20 patients during this period. Standard protocols were followed for the choice of hardware and dual antiplatelet agents. The data is analyzed for lesion characteristics, immediate results and 30-day follow-up.
Results: Of the 865 patients that had undergone PTCA during the study period, BVS were implanted in 20 patients (4 females). The mean age was 58 ±2.05 years. Of them 60% were diabetics and 65% were smokers. The location of the lesions was LAD (16), RCA (10), LCx/OM (3) or Ramus (1). The size of devices most frequently used included 3x 28 mm (13) 2.5 x28 mm(6) and 3x 18 mm (5).In 2 cases lesions were ostial and in 3 cases two stents with overlapping had to be done due to long segment disease. Multi-lesional PTCA was done in 5 cases. Of the 30 devices, four were used in 1 patient, three in 1, two in 5 and one each in rest of them. Procedural success was obtained in 19/20 (95%) procedures. One patient developed acute thrombosis in BVS on day one and had responded to balloon dilation and tirofiban infusion. There was no MACE at 30 day and 3 month follow-up. One patient at 5 month follow-up developed angina and had angiographic restenosis. Re-PTCA with DES was done. Patient was symptom-free at follow-up 3 months later.
Conclusions: In this real-world experience in a single center, with implantation of 30 BVS, the immediate results and short-term outcomes were very promising. Off-label use had been equally rewarding in our study.

Unprotected left main coronary artery stenting: A single unit experience

Y.V.C. Reddy, S.I. Singha

Apollo Main Hospital, Chennai, India

Background: Severe Unprotected LMCA disease, either isolated or associated with other stenoses, is usually treated by CABG